

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (Previously Presented): A plug-in connector for connecting and transmitting signals in a form of light beams from a circuit board to a back plane, wherein the plug-in connector comprises:

a) means for transmitting optical signals into the plug-in connector;

b) at least one mirror coupled to said transmitting means for deflecting light beams at an approximately 90° angle in the plug-in connector;

c) a lens system disposed adjacent to said mirror and coupled to said transmitting means, for coupling the light beams into the plug in connector.

Claim 2. (Previously Presented) The plug-in connector as in claim 1, wherein said means for transmitting optical signals comprises a plurality of glass fiber lines.

Claim 3. (Previously Presented) The plug-in connector as in claim 1, wherein said means for transmitting optical signals is a plurality of plastic polymer lines.

Claim 4. (Previously Presented) The plug-in connector as in claim 1, wherein said means for transmitting optical signals comprises a plurality of prisms, wherein said light beams always run within a same optical medium within said plug-in connector.

Claim 5. (Previously Presented) The plug-in connector as in claim 1, wherein the plug-in connector is formed as two symmetrical halves having a center plane in a plane for transmitting optical signals.

Claim 6. (Previously Presented) The plug-in connector as in claim 1, further comprising a plug in coupler for coupling said plug-in connector to the circuit board.

Claim 7. (Previously Presented) The plug-in connector as in claim 1, further comprising a clip for coupling said plug-in connector to the circuit board.

Claim 8. (Previously Presented) The plug-in connector as in claim 1, further comprising a plug in coupler for coupling said plug-in connector to the back plane.

Claim 9. (Previously Presented) The plug-in connector as in claim 1, further comprising a clip for coupling the plug-in connector to the back plane.

10. (Canceled)

Claim 11. (Previously Presented) The plug-in connector as in claim 1, further comprising a light seal disposed in an in-coupling point of the optical signal into the plug-in connector.

Claim 12 (New). A plug-in connector for connecting and transmitting data signals in a form of light beams from a circuit board to a back plane, wherein the plug-in connector comprises:

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a) at least one optical conductor for conducting data in the form of optical signals into the plug-in connector;

b) at least one mirror coupled to said transmitting means for deflecting light beams at an approximately 90° angle in the plug-in connector;

c) a lens system disposed adjacent to said mirror and coupled to said at least one optical conductor, for coupling the light beams into the plug in connector.